Application No.: 09/408,761
Filing Date: September 29, 1999
Title: METHODS FOR PRODUCTION OF ARRAYS
WITH MODIFIED OLIGONUCLEOTIDE AND POLYNUCLEOTIDE COMPOSITIONS

Inventor(s): Roderic M. K. Dale

Docket No.: 31249-716.201

Sheet 1 of 10



Figure 1

Application No.: 09/408,761
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Docket No.: 31249-716.201

Sheet 2 of 10

Figure 2

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Docket No.: 31249-716.201

Sheet 3 of 10

Figure 3

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Docket No.: 31249-716.201

Sheet 4 of 10

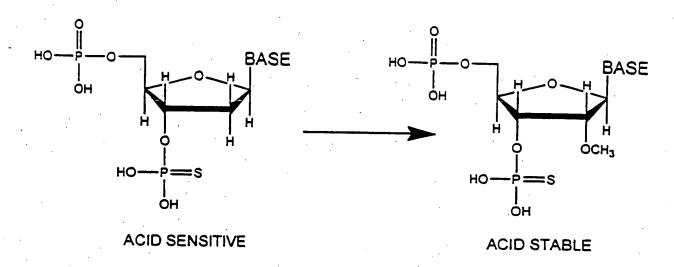


Figure 4

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Docket No.: 31249-716.201

Sheet 5 of 10

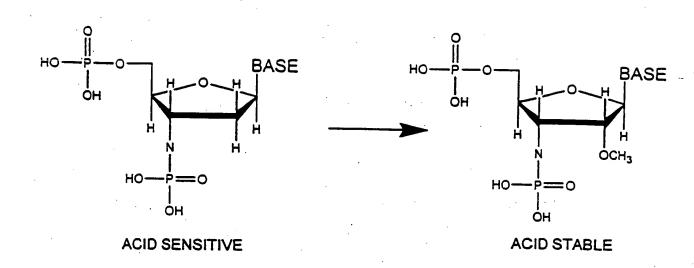


Figure 5



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Docket No.: 31249-716.201

Sheet 6 of 10

Figure 6

Application No.: 09/408,761
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Docket No.: 31249-716.201

Sheet 7 of 10

Figure 7

Application No.: 09/408,761 Filing Date: September 29, 1999 Title: METHODS FOR PRODUCTION OF ARRAYS WITH MODIFIED OLIGONUCLEOTIDE AND POLYNUCLEOTIDE COMPOSITIONS Inventor(s): Roderic M. K. Dale Docket No.: 31249-716.201 Sheet 8 of 10 HO BASE HOCH2CH2CH2CH2 BASE όн όн ÓCH₃ BASE BASE осн₃ ÓCH₃ HO-BASE BASE ÓН OCH₃

ACID STABLE .

ACID STABLE, END-BLOCKED

<u>5' end</u> Butanol Blocking Group

Figure 8

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Inventor(s): Roderic M. K. Dale

Docket No.: 31249-716.201

Sheet 9 of 10

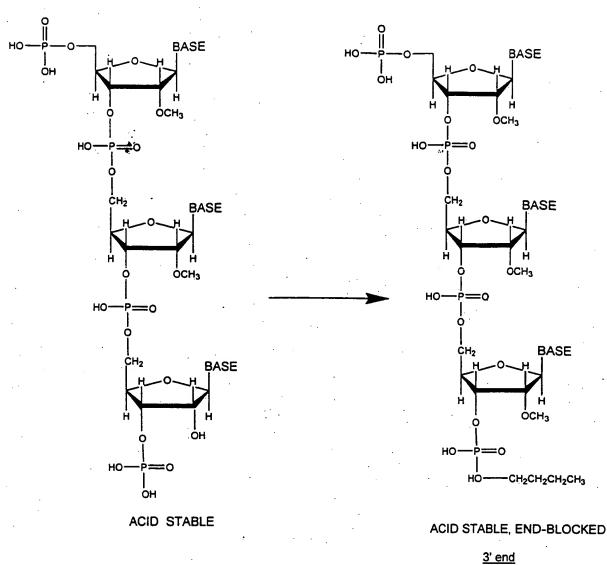


Figure 9

Butyl Blocking Group

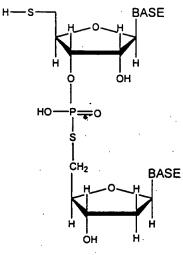


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Docket No.: 31249-716.201

Sheet 10 of 10



Nuclease Resistant

Substitution in O of sugar group Nuclease Resistant Higher T_ms

1' modification Nuclease Resistant

Phosphoramidate Nuclease Resistant Higher T_ms

Figure 10